

1 PROJECT NO. 00105 33184 SUBJECT: Epon 1462 Formulations DATE

Objective: For evaluation in cyclone project

5 Reference: BEST AVAILABLE COPY

	A	B	C	D → 40% silica Doubled this amount
EPON 1462	10g	10g	10g	20g
DEH 85	1g	1g	1g	2g
10 Polamine 6500	1g	1g	1g	2g
117883-90 (3)	1g	1g	2g	4g
2E-4M-Triazole (4% by wt)	.5g	.5g	.54g	1.08g
1E-05 Silster silica (3)	—	—	—	17.33g

(For Each)

15 The 1462 & DEH 85 were dissolved together & stirred until thoroughly mixed. I cooled them to R.T. & added the remaining materials (39D was done in a flask under vacuum) & stirred them in until mixture was homogeneous. These were evaluated by DSC for cure & T_g's. (39D^{30g}) was frozen for use by al Pocius ATC. Remainers were frozen for later use.

	Exotherm	1st heat	2nd heat	
39A	125°C 88 cal/g	10 minutes @ 130°C 1.0 cal/g 137°C*	133°C	10 minutes @ 130°C
25 39B	126°C 92.5 cal/g	.35 cal/g 128°C*	120°C	" "
39C	126°C 93 cal/g	.93 cal/g 119°C*	120°C	10 minutes @ 130°C
39C	—	2 cal/g 110°C	121°C	8 minutes @ 130°C
39D	125°C 53 cal/g	— 113°C	110°C	10 minutes @ 130°C

30 ★ See pg 38 All of the above were cured in DSC pans

③ From Kathy Thross AMTC. N#CC1=CC=CC=C1C(=O)OCC1=CC=CC=C1C(=O)N 3 carbons 3 carbons

35 ① From Air Products. Aromatic diamine terminated (MW = 650) N#CC1=CC=CC=C1C(=O)OCC1=CC=CC=C1C(=O)N

② 2nd batch from Nippon 500g. Sample of 39D cured in 4" x 4" x 1/16" pulsed 130°C mold. Cure time 11 minutes @ 130°C. water & ink soaked.

AUTHOR'S FULL NAME or INITIALS

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DATE:

WITNESS'S FULL NAME or INITIALS

JPC

DATE:

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